

12-28-99

Express Mail Label No. EL172581308US

Docket No.: EN999071

NEW UTILITY PATENT APPLICATION TRANSMITTAL

(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Total Pages this Submission: 3

TO THE ASSISTANT COMMISSIONER FOR PATENTS

Box Patent Application
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:
SYSTEM AND METHOD FOR DYNAMICALLY UPDATING A SITE MAP AND TABLE OF CONTENTS FOR SITE CONTENT CHANGES
and invented by:
MARK D. SMITH

If a CONTINUATION APPLICATION, check the appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application
No.: _____

Enclosed are:

Application Elements

01. ☒ Filing fee as calculated and transmitted as described below
02. ☒ Specification having 25 pages and including the following:
 - a. ☒ Descriptive Title of the Invention
 - b. ☐ Cross References to Related Applications (if applicable)
 - c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)
 - d. ☐ Reference to Microfiche Appendix (if applicable)
 - e. ☒ Background of the Invention
 - f. ☒ Brief Summary of the Invention
 - g. ☒ Brief Description of the Drawings (if drawings filed)
 - h. ☒ Detailed Description
 - i. ☒ Claim(s) as Classified Below
 - j. ☒ Abstract of the Disclosure
03. ☒ Drawing(s) when necessary as prescribed by 35 USC 113)
 - a. ☐ Formal
 - b. ☐ Informal

Number of sheets: 7

NEW UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

Total Pages this Submission:3

Application Elements (Continued)04. ☒ Oath or Declaration

- a. ☐ Newly executed (original or copy) ☒ Not executed
- b. ☐ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*
- c. ☒ With Power of Attorney ☐ Without Power of Attorney

05. ☐ Incorporation By Reference *(usable if box 4b is checked)*

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Item 4b, is considered as being part of the disclosure of accompanying application and is hereby incorporated by reference therein.

06. ☐ Computer Program in Microfiche *(Appendix)*07. ☐ Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all must be included)*

- a. ☐ Paper Copy
- b. ☐ Computer Readable Copy *(identical to computer copy)*
- c. ☐ Statement Verifying Identical Paper and Computer Readable Copy

Accompanying Application Parts08. ☐ Assignment Papers *(cover sheet & document(s))*09. ☐ 37 CFR 3.73(B) Statement *(when there is an assignee)*10. ☐ English Translation Document *(if applicable)*11. ☒ Information Disclosure Statement/PTO-1449 ☒ Copies of IDS citation12. ☐ Preliminary Amendment13. ☒ Acknowledgment postcard14. ☒ Certificate of Mailing

☐ First Class ☒ Express Mail (Label No: EL172581308US)

15. ☐ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*

NEW UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Total Pages this Submission:3

Accompanying Application Parts (Continued)

16. ☐ Additional Enclosures (identify below)

Fee Calculation and Transmittal

CLAIMS AS FILED

For	# Filed	# Allowed	# Extra	Rate	Fee
Total Claims	11	-20	0	x \$18.00	\$
Indep. Claims	7	- 3	4	x \$78.00	\$ 312.00
Multiple Dependent Claims _____					\$
				BASIC FEE	\$ 760.00
Other FEE (Specify purpose)					\$
				TOTAL FILING FEE	\$1,072.00

- ☐ A check in the amount of \$ _____ to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge and credit IBM Corporation Deposit Account No. 09-0457 as described below. A duplicate copy of this sheet is enclosed.
- ☒ Charge the amount of \$1,072.00 as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees as required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: 24 Dec 1999

Shelley M Beckstrand
Signature

Shelley M Beckstrand
Reg. No. 24,886

314 Main Street
Owego, NY 13827-1616
Phone: (607) 687-9913

CC:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: M. D. Smith
Serial No.: n/a Group No.: n/a
Filed: herewith Examiner: n/a
For: System and Method for Dynamically Updating a Site Map and Table of Contents for Site Content Changes

Assistant Commissioner For Patents
Washington, D.C. 20231

EXPRESS MAIL CERTIFICATE

"Express Mail" label number: EL172581308US

Date of Deposit: 27 Dec 1999

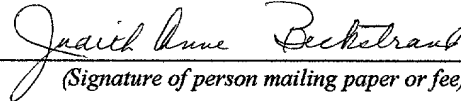
I hereby certify that the following attached paper or fee

New Utility Patent Application Transmittal
Specification: 25 pages (including claims)
Declaration and Power of Attorney
Drawings (7 sheets)
Express Mail Certificate
Information Disclosure Statement
PTO Form 1449 (revised)
Postcard

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

JUDITH ANNE BECKSTRAND

(Name of person mailing paper or fee)



(Signature of person mailing paper or fee)

NOTE: Each paper must have its own certificate and the "Express Mail" label number as a part thereof or attached thereto. When, as here, the certification is presented on a separate sheet, that sheet must (1) be signed and (2) fully identify and be securely attached to the paper or fee it accompanies. Identification should include the serial number and filing date of the application as well as the type of paper being filed, e.g., complete application, specification and drawings, responses to rejection or refusal, notice of appeal, etc. If the serial number of the application is not known, the identification should include at least the name of the inventor(s) and the title of the invention.

NOTE: The label number need not be placed on each page. It should, however, be placed on the first page of each separate document, such as, a new application, amendment, assignment, and transmittal letter for a fee, along with the certificate of mailing by "Express Mail". Although the label number may be on checks, such a practice is not required. In order not to deface formal drawings, it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a set of informal drawings on which the label number is placed.

APPLICATION
FOR
UNITED STATES LETTERS PATENT

APPLICANT NAME MARK D. SMITH

TITLE SYSTEM AND METHOD FOR DYNAMICALLY UPDATING A SITE MAP
AND TABLE OF CONTENTS FOR SITE CONTENT CHANGES

DOCKET NO. EN999071

INTERNATIONAL BUSINESS MACHINES CORPORATION

CERTIFICATE OF MAILING UNDER 37 CFR 1.10

I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C., 20231 as

"Express Mail Post Office to Addressee" on 27 Dec 1999
Mailing Label No. EL17258130845

Name of person mailing paper: Judith Anne Beckstrand

Judith Anne Beckstrand 27 Dec 1999
Signature Date

SYSTEM AND METHOD FOR DYNAMICALLY UPDATING A SITE MAP AND TABLE OF CONTENTS FOR SITE CONTENT CHANGES

Background of the Invention

Technical Field of the Invention

5 This invention pertains to web technology. More particularly, it relates to the preparation and display of web site maps and tables of contents dynamically updated to current content.

Background Art

10 In a very dynamic web site, such as a Lotus Domino web site, content is added and deleted almost daily, many times hourly. Domino views, or the like, for this content may be categorized by certain topical areas. Content within these topics are added or subtracted by a Content Editing Team.

15 In such an environment, it may be desirable or required to keep a site map and table of contents updated to match the content. Heretofore, it has been required that the site map and table of contents be updated manually. Most, if not all, site maps that exist on web sites are manually updated,

20 or are at such a high level that when content changes, the

site map is still accurate since it does not show low level details.

It is an object of the invention to provide an improved site map and table of contents for a web site.

5 It is a further object of the invention to provide a system and method for providing dynamic updating of a web page site map and table of contents.

10 It is a further object of the invention to provide a system and method enabling a dynamically updated web page site map and table of contents to link directly with volatile content.

 It is a further object of the invention to provide a system and a method enabling browser linking of site content to the site map and table of contents.

Summary of the Invention

A web site is broken up into main topical content areas. Each area shows a list of content items that the user can link to, displayed using views. A site map and
5 table of contents read these views to determine what the user should see. The site map is a high level category oriented view, and the table of contents is a more detailed view, getting lower level to content items. Each time the user requests the site map or table of contents, an agent is
10 executed to "lookup" into the content views, giving the user the very latest content.

In accordance with an aspect of the invention, there is provided a computer program product configured to be operable responsive to a request to view a site map and/or
15 table of contents to look into the underlying content views to provide the latest content to the site map and/or table of contents.

Other features and advantages of this invention will become apparent from the following detailed description of
20 the presently preferred embodiment of the invention, taken in conjunction with the accompanying drawings.

Brief Description of the Drawings

Figure 1 is a high level system diagram of the system of the preferred embodiment of the invention for displaying a site view, such as a site map and/or table of contents.

5 Figure 2 is a flow diagram of the method of the preferred embodiment of the invention.

Figure 3 is a screen capture representation of a topical content area page.

10 Figure 4 is a screen capture representation of a site map page.

Figure 5 is a screen capture representation of a table of contents page.

Figure 6 is a screen capture representation of a site map form.

15 Figure 7 is a screen capture representation of a table of contents form.

Best Mode for Carrying Out the Invention

Referring to Figure 1, in accordance with the preferred embodiment of the invention, a site view, such as site map 102 or a table of contents 104, for a web site, such as a Lotus Domino web site, is linked directly to content 106 within the web site using a browser 114.

In a Lotus Domino web site 101 which is very dynamic, content is added to and deleted from a content database 106 almost daily, many times hourly. Domino views 109 for this content are categorized by certain topical areas. Content within these topics are added or subtracted by a Content Editing Team 112. In order to keep a site view or form, such as a Site Map 102 and Table of Contents 104, updated to match the content, and allow a user to link to those content items using a browser 114, a Domino agent 108 is provided to "lookup" into the views 109 that describe the main content areas 106 for new or changed content, and present the most current results to the user 114 in display of site map 116 or TOC 104.

Views 109 are sorted or categorized lists of documents, and are the entry points to data stored in a database 106. Every database 106 must have at least one view 109, though most have a plurality of views. A database is a container
5 for data, logic, and design elements for an application. Design elements are building blocks used to create an application, and include pages, forms, outlines, navigators, views, folders, framesets, shared resources, and agents. Consequently, the agent 108 implementing the preferred
10 embodiment of the present invention is a design. A site map 102 is an outline view.

Forms, like pages, display information. Forms also collect information. A form provides the structure for creating and displaying documents, and documents are the
15 design element that store data in the database.

A field is the part of an application that collects data. Fields can be created on forms, subforms, or in layout regions. Each field stores a single type of information, and a field's field type defines the kind of
20 information a field accepts, such as text, numbers, dates, or names. When a user, either in a client or a browser, creates a form, fills out the information in the fields, and saves the form, the data in the fields is stored in an

individual document. The contents of the fields can then be displayed in documents and views or can be retrieved for use in formulas. When creating a field, the user defines the field name, field type, display options and field properties, computed or editable attribute, and formulas or scripts associated with the field. Items are field data.

Table 1 illustrates the format of a topical content area page.

TABLE 1: TOPICAL CONTENT AREA PAGE

1	Area Category 1	
2	Area 1 content item 1	
3	Area 1 content item 2	
4	. . . . .
5	Area 1 content item n	
6	Area Category 2	Descriptive Page Text
7	Area 2 content item 1	
8	Area 2 content item 2	
9	. . . . .
10	Area 2 content item n	
11	. . . . .
12	Area Category n	
13	Area n content item 1	
14	Area n content item 2	
15	. . . . .
16	Area n content item n	

Referring to Figure 3, a sample topical content area page is illustrated.

Table 2 illustrates the format of a site map 102.

TABLE 2: SITE MAP

1	Content Area 1	Content Area 2 ...	Content Area N
2	Area 1 Category 1	Area 2 Category 1	Area n Category 1
3	Area 1 Category 2	Area 2 Category 2	Area n Category 2
4	. . . .	. . . .	. . . .
5	Area 1 Category n	Area 2 Category n	Area n Category n

Referring to Figure 4, a sample site map page 102 is illustrated.

Table 3 illustrates the format of a table of contents 104.

TABLE 3: TABLE OF CONTENTS

1	Content Area 1
2	Area 1 Category 1
3	Area 1 content item 1
4	Area 1 content item 2
5	. . . . .
6	Area 1 content item n
7	. . . . .
8	Area 1 Category n
9	Area n content item 1
10	Area n content item 2
11	. . . . .
12	Area n content item n
13	Content Area 2
14	Area 2 Category 1
15	Area 2 content item 1
16	Area 2 content item 2
17	. . . . .
18	Area 2 content item n
19	. . . . .
20	Area 2 Category n
21	Area n content item 1
22	Area n content item 2
23	. . . . .
24	Area n content item n
25	. . . . .
26	Content Area N
27	Area N Category 1
28	Area N content item 1
29	Area N content item 2
30	. . . . .
31	Area N content item n
32	. . . . .
33	Area N Category n
34	Area n content item 1
35	Area n content item 2
36	. . . . .
37	Area n content item n
38	

Referring to Figure 5, a sample table of contents 104 is illustrated.

When ever an area category or content item is added to content database 106, or deleted, the lists of Tables 1-3 are immediately reflected to the user 114 whenever requested. For example, say in the "Competition" content area, "XYZ Consulting Group" is added. The next time the user looks at the Table of Contents 104, "XYZ Consulting Group" would appear there in "Competition" - no "design change" or manual update to the table of contents 104 is needed.

The site map 102 and TOC forms 104 are very similar. Referring to Figure 6, a site map form 102 is illustrated. Referring to Figure 7, a table of contents form 104 is illustrated.

Referring to Figure 6, there are five basic elements to the structure of the site map form 102, as follows:

1. Layout structure, in tabular form, for the site map.
2. Title "Site Map".
3. Header and footer, pulled in from the web site.

4. Form type identifier, SiteMap (used by the CreateMap agent of Table 4, infra.
5. Data field 116, filled in by CreateMap agent 108 with site map data dynamically when the page 116 is requested by the user.

Referring to Figure 7, there are five basic elements to the structure of the table of contents (TOC) form 104, as follows:

1. Layout structure, in a single column, for the TOC.
2. Title "Table of Contents"
3. Header and footer, pulled in from the web site.
4. Form type identifier, TOC (used by the CreateMap agent of Table 4, infra.
5. Data field 118, filled in by CreateMap agent 108 with TOC data dynamically when the page 104 is requested by the user.

Referring to Figure 2, in accordance with a preferred embodiment of the method of the invention, in step 120 the agent 108 to create the appropriate data for the site map 102 or table of contents (TOC) 104 first initializes variables that will be needed within the agent 108. In step 122, the agent 108 sets up the start of layout 113, 117 for

either the site map or table of contents, depending on the
form being request. If it is a site Map, an HTML table
structure 115 is set up, and if it is a TOC, an HTML list
structure 118 is set up. In step 124, the agent gets access
5 to the navigation view 110 for the site. In step 126, for
each navigation document 111 in the view, the agent 108
determines the appropriate category name and, in step 128,
the agent adds an HTML list item 115 or 118 for the category
and a URL to link within the site 101. Continuing in step
10 128, if this execution of the agent 108 is with respect to
the TOC 104, a list item 118 is added for the document name
and the URL to a location on site 101. In step 130, the
agent closes table cells as appropriate, and in step 132
handles any special case(s) that may need to be added. In
15 step 134, all of this data 115, 118 is moved and saved to a
field 116, 118 on the appropriate form 102, 104 for display.

Table 4 sets forth the agent code for the create map
procedure of the preferred embodiment of the invention, as
described above with respect to Figure 2.

TABLE 4: CREATE MAP AGENT

```
1 Sub Initialize
2   Dim session As New notessession
3   Dim db As notesdatabase
4   Dim view As notesview
5   Dim doc As notesdocument
6   Dim doc2 As notesdocument
7   Dim dc As notesdocumentcollection
8   Dim mainview As NotesView
9
10  Set db = session.currentdatabase
11  Set doc2 = session.documentcontext
12
13  If doc2.MapType(0) = "sitemap" Then
14    tablestart = "[<TABLE CELLSPACING=1 CELLPADDING=0
15    BORDER=1>]"
16    tableend = "[</TABLE>]"
17    cellstart = "[<TD ALIGN=LEFT VALIGN=TOP><img
18    src=""/cons/home/spacer.gif"" width=130 height=1
19    border=0>]"
20    cellend = "[</TD>]"
21  Else
22    tablestart = ""
23    tableend = ""
24    cellstart = ""
25    cellend = ""
26  End If
27
28  Set mainview = db.GetView("layerMap")
29  Set doc = mainview.getfirstdocument
30  category = ""
31  sub_category = ""
32  maincatnum = 0
33
34  While Not doc Is Nothing
35    If category <> doc.Category_Name(0) Then
36      category = doc.Category_Name(0)
37      Select Case Lcase(category)
38      Case "refs"
39        viewtitle = "Our Customers"
40        viewurl =
41        "/home.nsf/references?OpenView"
42      Case "e-biz"
43        viewtitle = "e-business Essentials"
```



```

93         "[<li>]" + doc.Title(0)
94     End If
95     Else
96         DisplayField = DisplayField + "[<li>]" +
97         doc.Title(0)
98     End If
99     Else
100         If sub_category <> doc.SubCategory(0) Then
101             sub_category = doc.SubCategory(0)
102             If doc2.MapType(0) = "sitemap" Then
103                 catnum = catnum + 1
104                 url = viewurl + "&Expand=" +
105                 Cstr(catnum) + "#" + Cstr(catnum)
106                 DisplayField = DisplayField +
107                 {[</ul><li><a href="} + url + {">]}
108                 + sub_category + {[</a><ul>]}
109             Else
110                 DisplayField = DisplayField +
111                 "[</ul><li><b>]" + sub_category +
112                 "[</b><ul>]"
113                 DisplayField = DisplayField +
114                 "[<li>]" + doc.Title(0)
115             End If
116         Else
117             If sub_category = "" Then
118                 DisplayField = DisplayField +
119                 "[<li>]" + doc.Title(0)
120             Else
121                 If doc2.MapType(0) = "toc" Then
122                     DisplayField = DisplayField +
123                     "[<li>]" + doc.Title(0)
124                 End If
125             End If
126         End If
127     End If
128
129     Set doc = mainview.getnextdocument (doc)
130 Wend
131
132     'Handle Priority Offerings (Solutions) SPECIAL
133
134     'Priority Offerings (Solutions)
135     viewurl = "/home.nsf/globale-bussol?ReadForm"
136     viewtitle = "Solutions"
137     solutions = "[</ul><p></font><font size=4><a href=" +
138     viewurl + ">" + viewtitle + "</a></font><font size=-
139     1><ul>]"
140     DisplayField = DisplayField + cellend + cellstart +
141     solutions

```

```

142      'e-commerce
143      viewurl = "/ecomm.nsf/ECOMhome?ReadForm"
144      viewtitle = "E-commerce"
145      ecomm = {[<li><a href="} + viewurl + {">]} + viewtitle
146      + {[</a>]}
147      DisplayField = DisplayField + ecomm
148      'ERP
149      viewurl = "/erp"
150      viewtitle = "ERP"
151      erp = {[<li><a href="} + viewurl + {">]} + viewtitle +
152      {[</a>]}
153      DisplayField = DisplayField + erp
154
155      DisplayField = DisplayField + "[</font></ul></ul>]" +
156      cellend + tableend
157      Call doc2.ReplaceItemValue("DisplayMap",DisplayField)
158
159 End Sub

```

Advantages over the Prior Art

It is an advantage of the invention that there is provided an improved site map and table of contents for a web page.

5 It is an advantage of the invention that there is provided a system and method for providing dynamic updating of a web page site map and table of contents.

It is an advantage of the invention that there is

provided a system and method enabling a dynamically updated web page site map and table of contents to link directly with volatile content.

5 It is an advantage of the invention that there is provided a system and a method enabling browser linking of site content to the site map and table of contents.

Alternative Embodiments

10 It will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without departing from the spirit and scope of the invention. In particular, it is within the scope of the invention to provide a computer program product or program element, or a program storage or memory device such as a
15 solid or fluid transmission medium, magnetic or optical wire, tape or disc, or the like, for storing signals readable by a machine, for controlling the operation of a computer according to the method of the invention and/or to structure its components in accordance with the system of
20 the invention.

Further, each step of the method may be executed on any general computer, such as an IBM System 390, AS/400, PC or the like and pursuant to one or more, or a part of one or more, program elements, modules or objects generated from any programming language, such as C++, Java, Pl/1, Fortran or the like. And still further, each said step, or a file or object or the like implementing each said step, may be executed by special purpose hardware or a circuit module designed for that purpose.

Accordingly, the scope of protection of this invention is limited only by the following claims and their equivalents.

CLAIMS

We claim:

1. A method for displaying a site view, comprising the steps of:

organizing a site as a collection of topical content areas, each said area containing a list of content items that a user can link to for display using views;

providing a site view as category oriented view; and

responsive to a user request for display of said site view, executing an agent to obtain and display to said user the latest content.

2. The method of claim 1, said site view including a site map and a table of contents, said site map being a high level category oriented view, and the said of contents being a more detailed view, getting to a lower level of

content items.

3. System for displaying a site view, comprising:

means for organizing a site as a collection of topical content areas, each said area containing a list of content items that a user can link to for display using views;

means for providing a site view as category oriented view; and

means responsive to a user request for display of said site view, for executing an agent to obtain and display to said user the latest content.

4. A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for displaying a site view, said method steps comprising:

organizing a site as a collection of topical content areas, each said area containing a list of content

items that a user can link to for display using views;

providing a site view as category oriented view; and

responsive to a user request for display of said site view, executing an agent to obtain and display to said user the latest content.

5. A system for displaying a site view, comprising:

a content database for storing a plurality of documents;

a site view layout structure;

a site navigation view;

a user browser;

a create map agent for accessing said site navigation view to identify documents in said content database and extract to said site view layout structure data for presentation in fields of said site view.

6. The system of claim 5, said site view including a site map and a table of contents and said site view layout structure including an HTML table structure and an HTML list structure for populating fields respectively in said site map and said table of contents.
7. The system of claim 6, further comprising a site map form for providing a tabular layout structure for said site map, and a table of contents form for providing a column layout structure for said table of contents.
8. The system of claim 7, said site map form and said table of contents form providing respective data fields for receiving data from said create map agent dynamically responsive to a request from a user for display of said site map or table of contents.
9. Method for displaying a site view, comprising the steps of:
- responsive to a user request for a display of said site view, setting up a site view layout structure;

identifying in a navigation view one or more navigation documents;

for each navigation document identified, determining the category name and adding a list item for said category to said site view layout structure;

copying each said list item from said layout structure to said site view for display responsive to said user request.

10. An article of manufacture comprising:

a computer useable medium having computer readable program code means embodied therein for displaying a site view, the computer readable program means in said article of manufacture comprising:

computer readable program code means for causing a computer to effect
organizing a site as a collection of topical content areas, each said area containing a list of content items that a user can link to for display using views;

computer readable program code means for causing a computer to effect providing a site view as category oriented view; and

computer readable program code means for causing a computer to effect, responsive to a user request for display of said site view, executing an agent to obtain and display to said user the latest content.

11. A computer program product or computer program element for displaying a site view according to the steps of:

organizing a site as a collection of topical content areas, each said area containing a list of content items that a user can link to for display using views;

providing a site view as category oriented view; and

responsive to a user request for display of said site view, executing an agent to obtain and display to said user the latest content.

SYSTEM AND METHOD FOR DYNAMICALLY UPDATING A SITE MAP AND
TABLE OF CONTENTS FOR SITE CONTENT CHANGES

Abstract of the Disclosure

5 A web site is broken up into main topical content
areas. Each area shows a list of content items that the
user can link to, displayed using views. A site map and
table of contents read these views to determine what the
user should see. The site map is a high level category
10 oriented view, and the table of contents is a more detailed
view, getting lower level to content items. Each time the
users requests the site map or table of contents, an agent
is executed to "lookup" into the content views, giving the
user the very latest content.

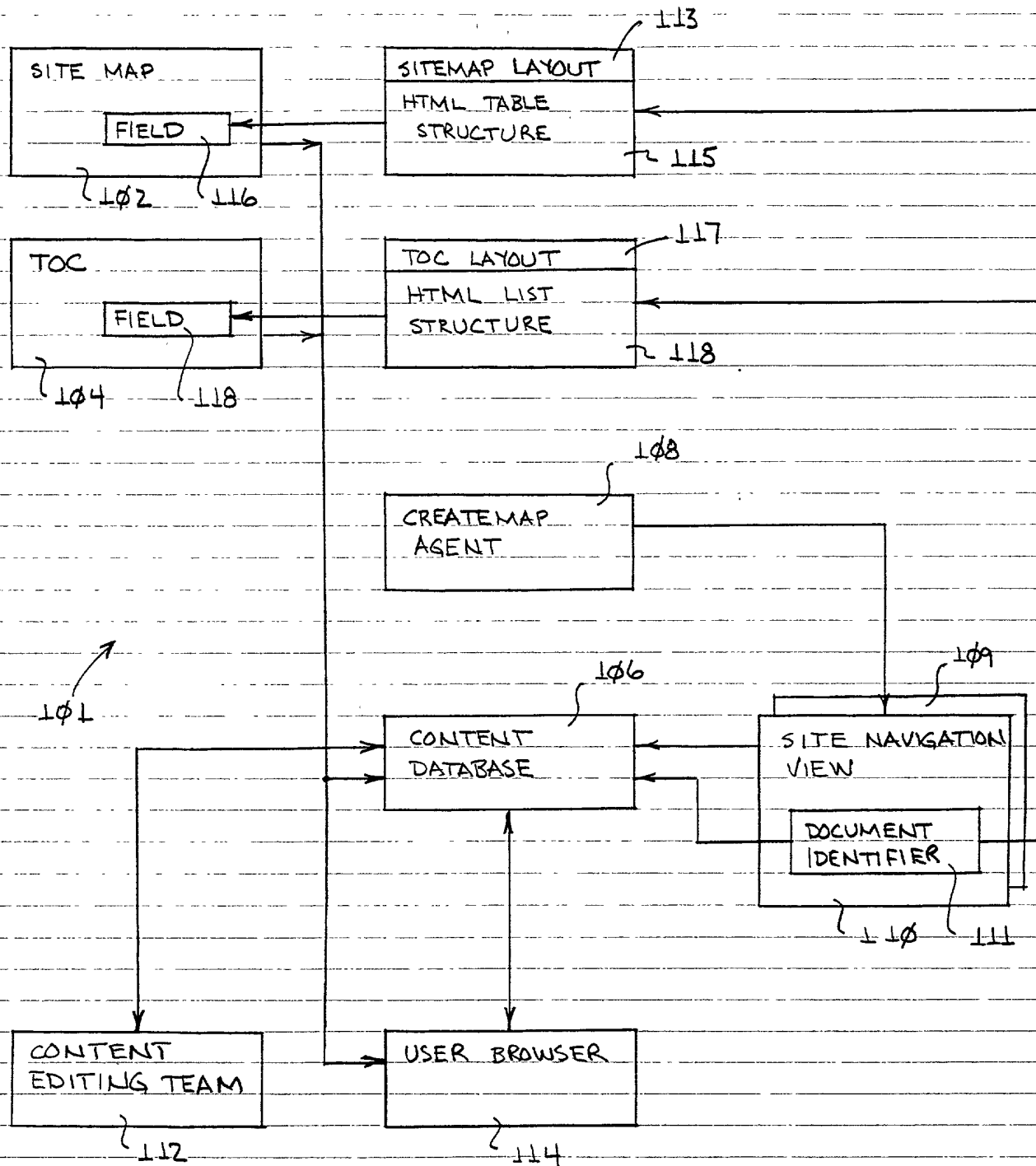


FIG. 1

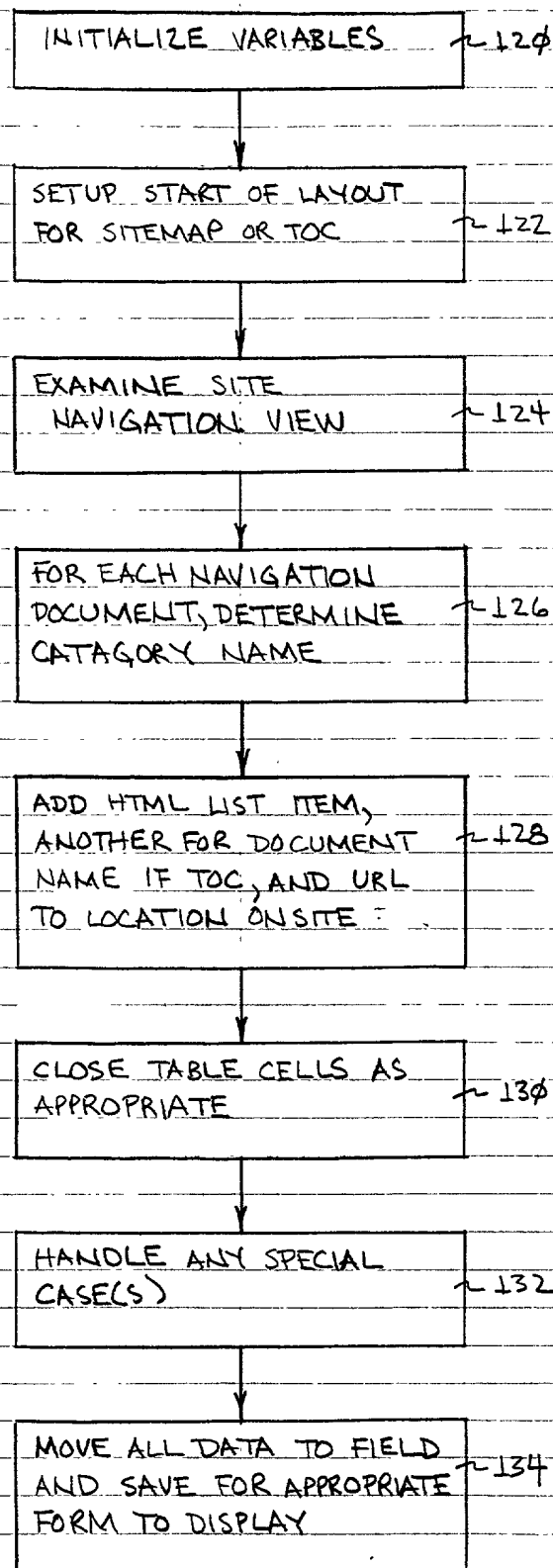
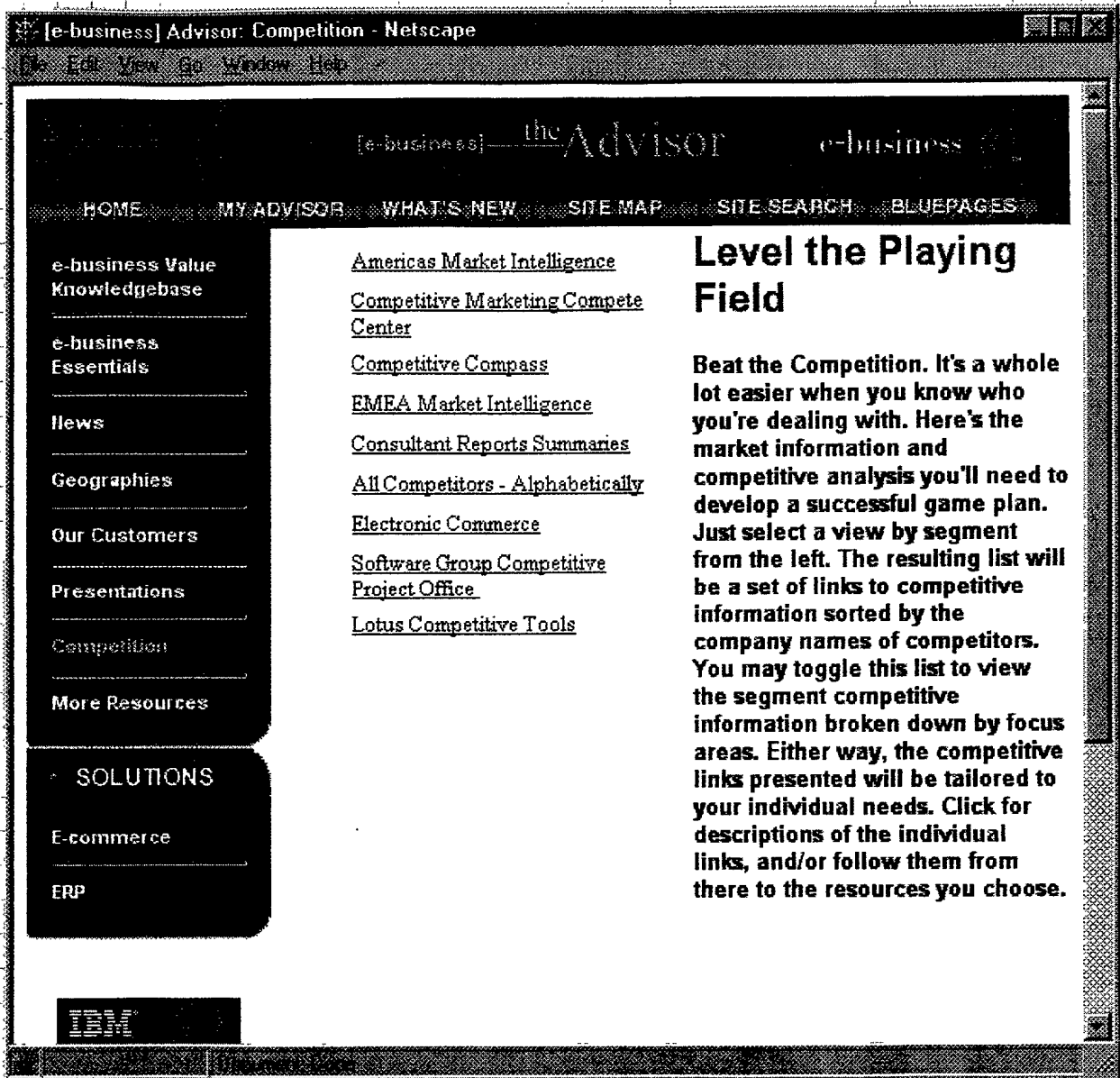
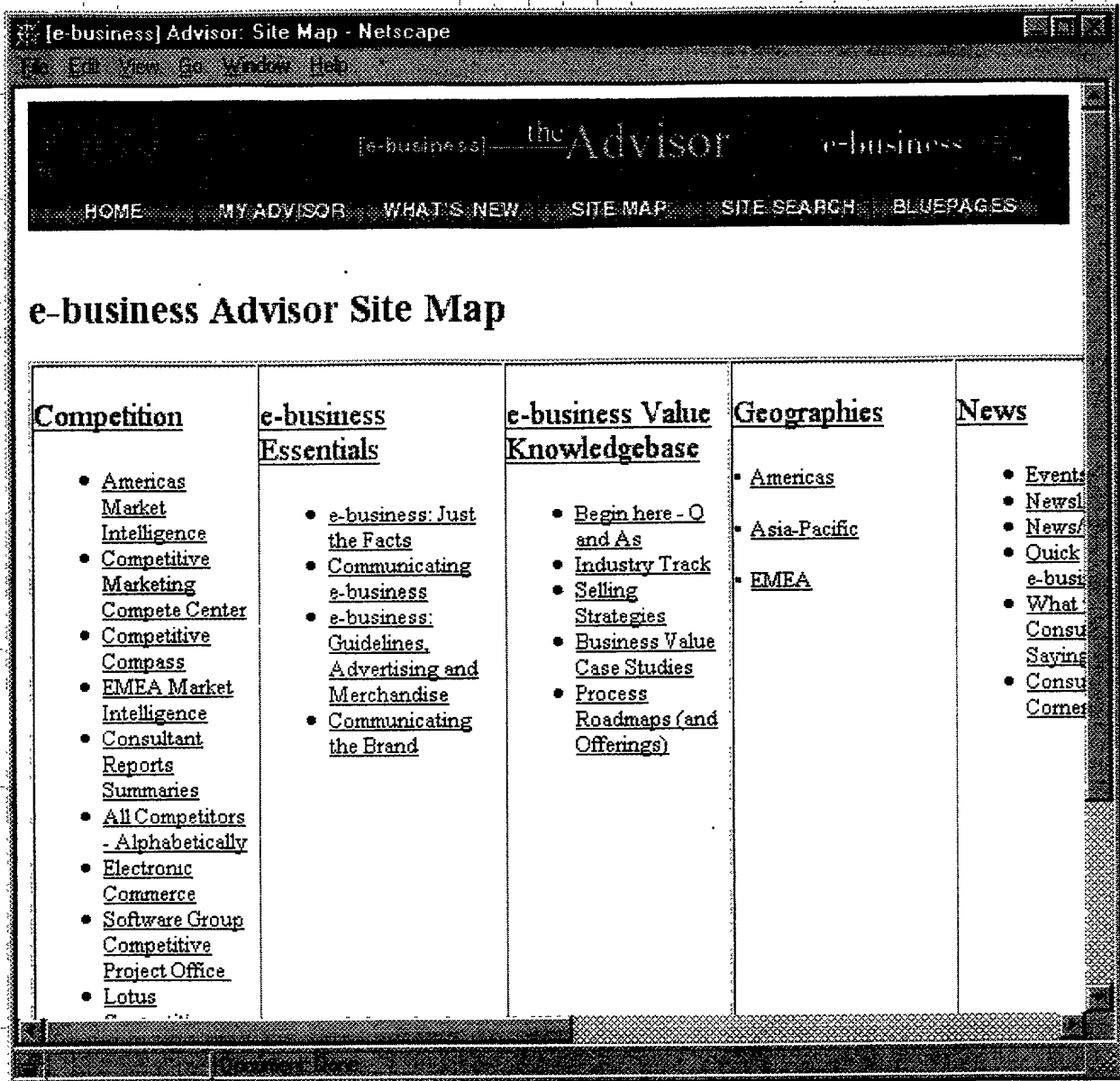


FIG. 2



TOPICAL CONTENT AREA PAGE

FIG. 3



SITE MAP PAGE

FIG. 4

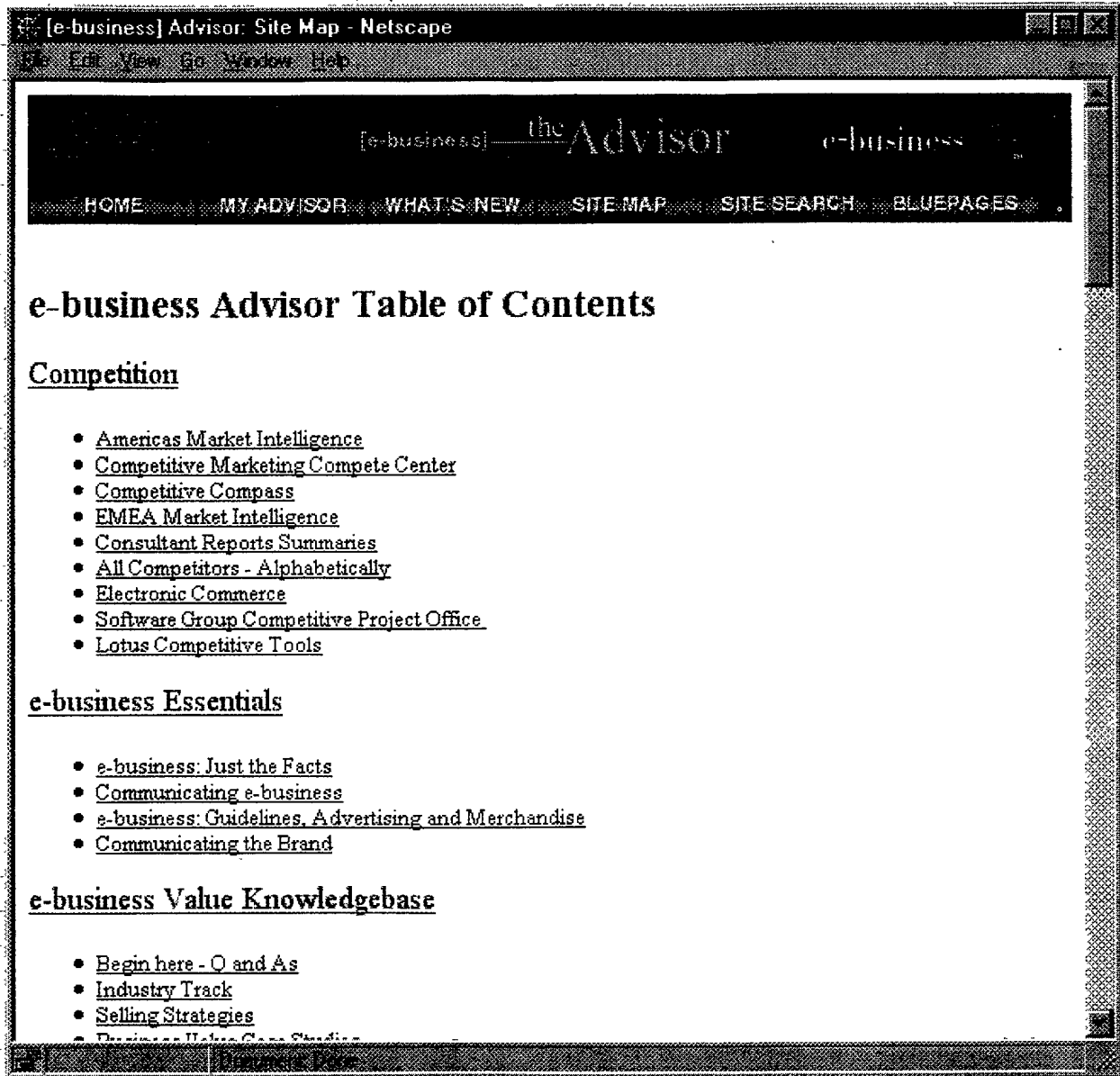


TABLE OF CONTENTS

FIG. 5

Site Map - Form - Lotus Notes

File Edit View Create Design Test Window Help

OrgName Needed for Open Agent: MapType

[Header Subform]

e-business Advisor Site Map

[<TABLE CELLSPACING=0 CELLPADDING=0 BORDER=0><TR><TD ALIGN="LEFT" VALIGN="TOP">] DisplayMap [</TD></TR></TABLE>]

\$\$QueryOpenAgent

[Footer Subform]

< Submit

SITE MAP FORM

FIG. 6

Table Of Contents - Form - Lotus Notes

File Edit View Create Design Test Window Help

OrgName Needed for Open Agent: MapType

[Header Subform]

e-business Advisor Table of Contents

[<TABLE CELLSPACING=0 CELLPADDING=0 BORDER=0><TR><TD ALIGN="LEFT" VALIGN="TOP">] DisplayMap [</TD></TR></TABLE>]

\$\$QueryOpenAgent

[Footer Subform]

<| Submit

File Edit View Create Design Test Window Help

TABLE OF CONTENTS FORM

FIG. 7

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

Atty.Docket No. EN9999071

EXPRESS MAIL: EL172581308US

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:
SYSTEM AND METHOD FOR DYNAMICALLY UPDATING A SITE MAP AND TABLE OF CONTENTS FOR SITE CONTENT CHANGES

the specification of which (check one)

_____ is attached hereto.

_____ was filed on _____ as Application Serial No. _____ and was amended on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, section 119 of any foreign application(s) for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

Number	Country	Daty/Month/Year	Priority Claimed
--------	---------	-----------------	------------------

I hereby claim the benefit under Title 35, United States Code, section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States applications in the manner provided by the first paragraph of Title 35, United States Code, section 112, I acknowledge the duty to disclose information material to the patentability of this application as defined in Title 37, Code of Federal Regulations, section 1.56 which occurred between the filing date of the prior application and the national or PCAT international filing date of this application:

Prior U.S. Applications:

Serial No.	Filing Date	Status
------------	-------------	--------

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: David L. Adour, Reg. No. 29,604; Lawrence R. Fraley, Reg. No. 26,885; John R. Pivnichny, Reg. No. 43,001; Arthur J. Samodovitz, Reg. No. 31,297; William H. Steinberg, Reg. No. 28,540; Christopher A. Hughes, Reg. No. 26,914; Edward A. Pennington, Reg. No. 32,588; John H. Hoel, Reg. No. 26,279; Joseph C. Redmond, Jr., Reg. No. 18,753; and Shelley M Beckstrand, Reg. No. 24,886.

Send all correspondence to: Shelley M Beckstrand, P.C.
Attorney at Law
314 Main Street
Owego, NY 13827
Direct telephone calls to: (607) 687-9913

Signature: _____ Date: _____

(MARK D. SMITH)
Residence: 3867 BRINKMAN ROAD, BINGHAMTON, NY 13903-6441
Citizenship: U.S.A.
Post Office Address: SAME AS RESIDENCE